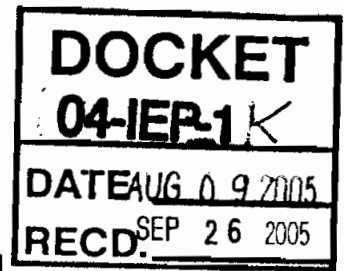


# Major New Solar Energy Project Announced By Southern California Edison and Stirling Energy Systems, Inc.



**August 9, 2005**

ROSEMEAD, Calif., Aug. 9, 2005—Edison International (NYSE:EIX) subsidiary Southern California Edison (SCE), the nation's leading purchaser of renewable energy, and Stirling Energy Systems today announced an agreement that could result in construction of a massive, 4,500-acre solar generating station in Southern California. When completed, the proposed power station would be the world's largest solar facility, capable of producing more electricity than all other U.S. solar projects combined.

The 20-year power purchase agreement signed today, which is subject to California Public Utilities Commission approval, calls for development of a 500-megawatt (MW) solar project 70 miles northeast of Los Angeles using innovative Stirling dish technology. The agreement includes an option to expand the project to 850 MW. Initially, Stirling would build a one-MW test facility using 40 of the company's 37-foot-diameter dish assemblies. Subsequently, a 20,000-dish array would be constructed near Victorville, Calif., during a four-year period.

"At a time of rising fossil-fuel costs and increased concern about greenhouse-gas emissions, the Stirling project would provide enough clean power to serve 278,000 homes for an entire year," said SCE Chairman John Bryson. "Edison is committed to facilitating development of new, environmentally sensitive, renewable energy technologies to meet the growing demand for electricity here and throughout the U.S."

Although Stirling dish technology has been successfully tested for 20 years, the SCE-Stirling project represents its first major application in the commercial electricity generation field. Experimental models of the Stirling dish technology have undergone more than 26,000 hours of successful solar operation. A six-dish model Stirling power project is currently operating at the Sandia National Laboratories in Albuquerque, New Mexico.

"We are especially pleased about the financial benefits of this agreement for our customers and the state," said Alan Fohrer, SCE chief executive officer. "The contract requires no state subsidy and provides favorable pricing for ratepayers because tests have shown the Stirling dish technology can produce electricity at significantly lower costs than other solar technologies."

## **How It Works**

The Stirling dish technology converts thermal energy to electricity by using a mirror

array to focus the sun's rays on the receiver end of a Stirling engine. The internal side of the receiver then heats hydrogen gas which expands. The pressure created by the expanding gas drives a piston, crank shaft, and drive shaft assembly much like those found in internal combustion engines but without igniting the gas. The drive shaft turns a small electricity generator. The entire energy conversion process takes place within a canister the size of an oil barrel. The process requires no water and the engine is emission-free.

### **Comparison to Other Solar Technologies**

Tests conducted by SCE and the Sandia National Laboratories have shown that the Stirling dish technology is almost twice as efficient as other solar technologies. These include parabolic troughs which use the sun's heat to create steam that drives turbines similar to those found in conventional power plants, and photovoltaic cells which convert sunlight directly into electricity by means of semiconducting materials like those found in computer chips.

### **Related Facts**

- SCE procured more than 13,000 gigawatt-hours\* of renewable energy in 2004, more than any U.S. utility and enough to power almost two million homes for an entire year.
- In 2004, more than 18% of the power SCE delivered to the 13 million Californians it serves came from renewable energy sources.
- SCE's current renewable portfolio can deliver 2,588 MW of electricity, including
  - 1,021 MW from wind
  - 892 MW from geothermal
  - 354 MW from solar
  - 226 MW from biomass
  - 95 MW from small hydro.
- Within the next several weeks, SCE will launch its ninth request for offers by independent power producers in the past three years and the third exclusively for proposals by renewable energy providers. These open, competitive solicitations have resulted in 12 new renewable contracts with a maximum potential capacity of 1,630 MW.

\*A gigawatt equals one billion watts.

Visuals available at [www.edisonnews.com](http://www.edisonnews.com)

Under "Press Kits", "Edison, America's Leading Purchaser of Renewable Energy"

- Two 300 dpi photos of Stirling dish
- Two artists renderings, one of the inside of a Stirling engine, the other of a large installation of Stirling dishes
- An animated clip of how the Stirling engine generates electricity

- Time-lapse photography of a Stirling dish tracking the sun from dawn to dusk

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*An Edison International (NYSE:EIX) company, Southern California Edison is one of the nation's largest electric utilities, serving a population of more than 13 million via 4.6 million customer accounts in a 50,000-square-mile service area within central, coastal and Southern California.*

## SCE Signs Six New Renewable Power Contracts

**March 9, 2005**

ROSEMEAD, Calif., March 9, 2005 — Southern California Edison (SCE) has submitted for review by the California Public Utilities Commission (CPUC) six new long-term contracts with power generators using wind, biomass, and geothermal energy.

If approved by the CPUC, the contracts would add as much as 427 megawatts\* (MW) to SCE's renewable power portfolio, already the nation's largest, when construction is completed between 2006 and 2009.

"We congratulate the winning bidders in our second major solicitation under California's new renewable portfolio standard," said SCE CEO Alan Fohrer. "These contracts represent a significant step in SCE's continuing commitment to renewable energy as well as the implementation of the state's renewable policy."

### Results of SCE's Renewable Power Solicitation

Winning Bidder	Location	Type	Length	Initial MW	Potential MW
1 Coram Energy Group	Tehachapi	Wind	20 yrs	12.0	100.0
2 McCarthy Farms Biofuels	Imperial Valley	Biomass	15 yrs	5.0	15.0
3 SeaWest Wind Power	San Geronio	Wind	20 yrs	37.0	50.0
4 Silvan Biomass	Western Sierra	Biomass	20 yrs	7.5	22.5
5 Vulcan Power Co.	Western Nevada	Geothermal	20 yrs	30.0	120.0
6 Western Wind	Tehachapi	Wind	20 yrs	50.0	120.0
<b>Totals</b>				141.5	427.5

Five of the contracts would result in the construction of new renewable generation capacity at a time when California is attempting to cope with surging population growth and electricity

demand. The sixth involves the significant expansion of an existing facility.

“We are encouraged that this solicitation process has yielded competitively priced renewable power for our customers requiring no state subsidy,” said SCE Vice President of Power Procurement Pedro Pizarro. “We will continue to look for opportunities to add to our renewable portfolio.”

More than 150 independent renewable power producers are under contract to SCE. They can generate more than 2,500 MW of electricity – approximately 18.2% of the power SCE delivered to its customers during 2004. California’s renewable portfolio standard requires that investor-owned utilities obtain 20% of their power from renewable sources by 2010.

- **Related Facts**  
SCE leads the nation in renewable power delivery, procuring more than 13,000 gigawatt-hours\*\* of renewable energy in 2004, more than any U.S. utility or state except for California.
- SCE’s current renewable portfolio can deliver 2,588 MW of electricity
  - 1,021 MW from wind energy
  - 892 MW from geothermal
  - 354 MW from solar
  - 226 MW from biomass
  - 95 MW from small hydro

\*A megawatt is enough power to serve 750 average homes during summer months.

\*\*A gigawatt equals one billion watts.

# # #

**From:** <Janos.Kakuk@SCE.com>  
**To:** "Ross Miller" <Rmiller@energy.state.ca.us>  
**Date:** 9/6/2005 11:10:25 AM  
**Subject:** Re: Request for info for draft IEPR

Ross,

I am sorry for the delayed response.

Here are the two press releases that we have made that address our new renewable contracts after January 1 2004. They discuss the Stirling Project for 500 MW, potentially up to 850 MW, as well as the results of the 6 contracts we filed in March for 141.5 MW, potentially up to 427.5 MW. So we have 7 renewable contracts, all for more than 5 years with a total of 641.5 up to 1277.5 MW new renewable resources.

With respect the regular contracts, our procurement department do not think that any of the information you requested were made public.

I hope that this information is helpful, regards,

Janos

(See attached file: Press releases.doc)

Janos Kakuk  
Resource Planning & Strategy  
Southern California Edison  
(626) 302-2342 PAX 2-2342  
janos.kakuk@sce.com

**From:** "Anderson, Robert B. (Rob)" <RAnderson@semprautilities.com>  
**To:** "Ross Miller" <Rmiller@energy.state.ca.us>  
**Date:** 9/9/2005 2:32:31 PM  
**Subject:** RE: suggested confidentiality language for data transmittal

Ross here is the summary data you asked for regarding contracts. Given this is based on public info there is no need for confidential protection for this summary data.

Since 1/1/04 SDG&E has signed the following contracts:

Terms of 1 to 3 years: no contracts

Terms of 3 to 5 years: no contracts

Terms of 5 years or longer: 4 contracts for 369 MW. Total MW does not include options.

This data is as of 9/09/05. We hope to be able to announce some more signings in the near future.

Hope this meets you need.

**CC:** "Kloberdanz, Joseph R." <JKloberdanz@semprautilities.com>,  
"Urlick, Lisa" <LUrlick@Sempra.com>, "Bartolomucci, Vincent D." <VBartolomucci@semprautilities.com>